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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,375	12/03/2003	Hideharu Hiwaki	YMOR:299	3135
6160	7590	03/17/2004	EXAMINER	
PARKHURST & WENDEL, L.L.P.			LE, DANG D	
1421 PRINCE STREET			ART UNIT	
SUITE 210			PAPER NUMBER	
ALEXANDRIA, VA 22314-2805			2834	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,375	Applicant(s) HIWAKI ET AL.	
	Examiner Dang D Le	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20031203</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (6,544,009) in view of Ojima et al. (6,700,273).

Regarding claim 1, Makino et al. show a motor comprising:

- A stator (Figure 4) having an annular yoke (3a), a plurality of teeth disposed at an inner circumferential portion of the yoke and a stator core formed with slots (3e) between the plurality of teeth, with three-phase concentrated winding wires provided to the teeth; and

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- A rotor (3b) rotatably held in an opposed relation to an inner circumference of said stator via a small clearance, and provided with permanent magnets inside or on a surface of the rotor core;
- Said stator core having an outer circumference partly being in wherein the close contact with and held by a housing (1), yoke located adjacent to outer circumferences of the teeth is provided with axially penetrating through-holes (42), and the outer circumference of the stator core located adjacent to outer circumferences of the through-holes is in close contact with the housing.

Makino et al. do not use the concentrated windings.

Ojima et al. use the concentrated windings for the purpose of reducing size.

Since Makino et al. and Ojima et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use concentrate windings as taught by Ojima et al. for the purpose discussed above.

Regarding claims 6 and 7, it is noted that Makino et al. also show all of the limitations of the claimed invention.

4. Claims 2, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redding, Jr (2,953,699) in view of Ojima et al. (6,700,273).

Regarding claims 2, 3, and 5, Redding Jr shows all of the limitations of the claimed invention including a notch (12) being formed at an outer circumference of the

yoke located adjacent to an outer periphery of the slot (5) so that the outer circumference of the stator core does not contact the housing (3) in the notch.

Redding Jr does not show three-phase concentrated windings and a permanent magnet rotor.

Ojima et al. use the concentrated windings and the permanent magnet rotor for the purpose of reducing size.

Since Redding Jr and Ojima et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the concentrate windings and the permanent magnet rotor as taught by Ojima et al. for the purpose discussed above.

Allowable Subject Matter

5. Claim 4 is allowed.
6. The following is a statement of reasons for the indication of allowable subject matter: the record of prior art does not show a motor comprising a housing and a stator yoke with a notch formed at an outer circumference of the yoke located adjacent to an outer periphery of the slot so that the outer circumference of the stator core does not contact the housing at the notch, axially penetrating through-holes are provided in the yoke located adjacent to outer circumferences of the teeth, and the outer circumference of the stator core located adjacent to an outer circumference of the through-hole is in close contact with the housing as claimed in claim 4.

Information on How to Contact USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/8/04

A handwritten signature in black ink, appearing to read 'Dang D Le', with a stylized flourish at the end.

**DANG LE
PRIMARY EXAMINER**